Thumb Run E. coli Project

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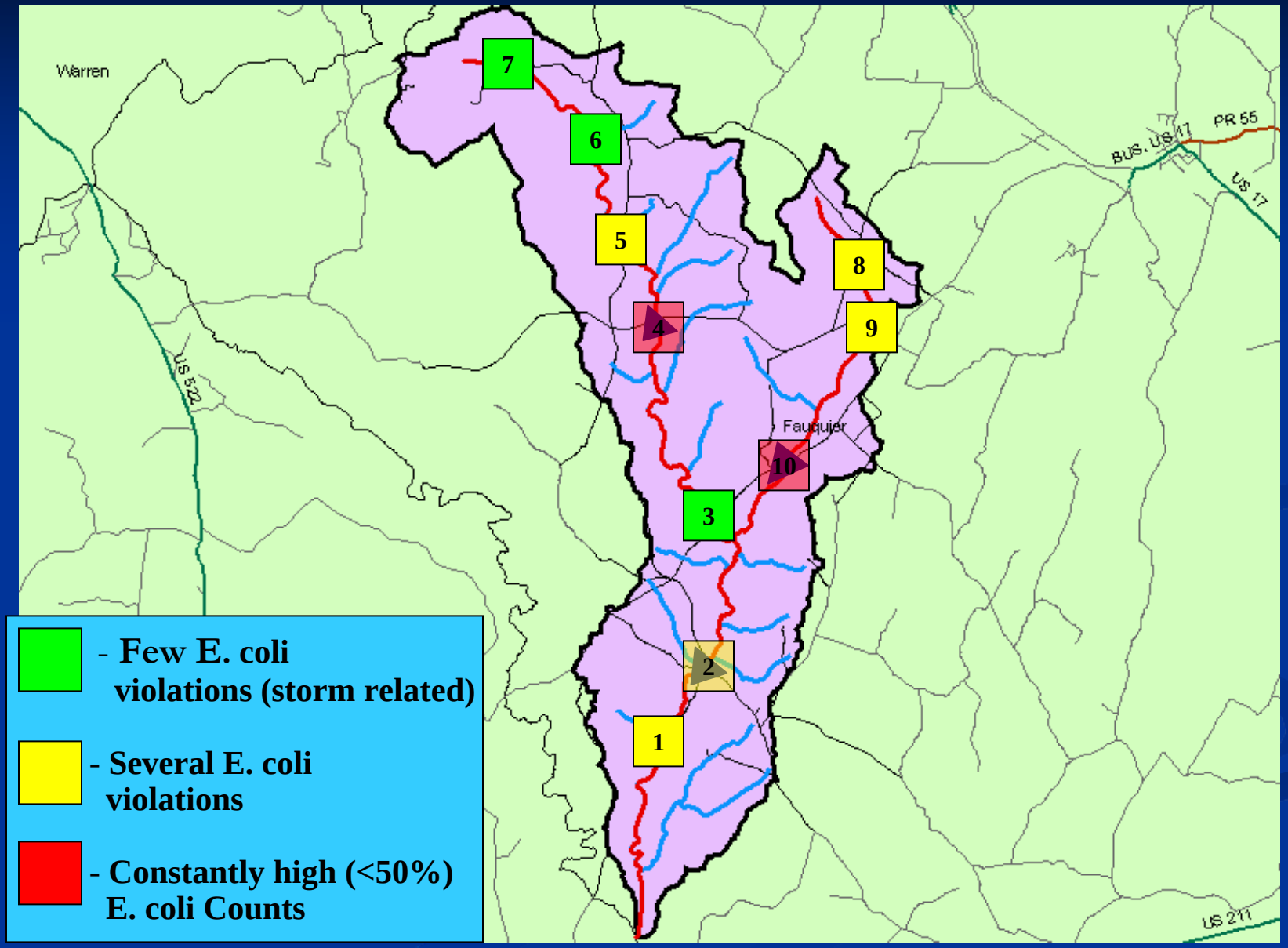
Thumb Run Facts

- Listed in 1998 for fecal coliform
- Tributary of Rappahannock River
- North and west of Warrenton
- 21,780 acre watershed
- About 50-50 agricultural and forest
- Monitoring for E. coli with Coliscan Easygel method since October 2005

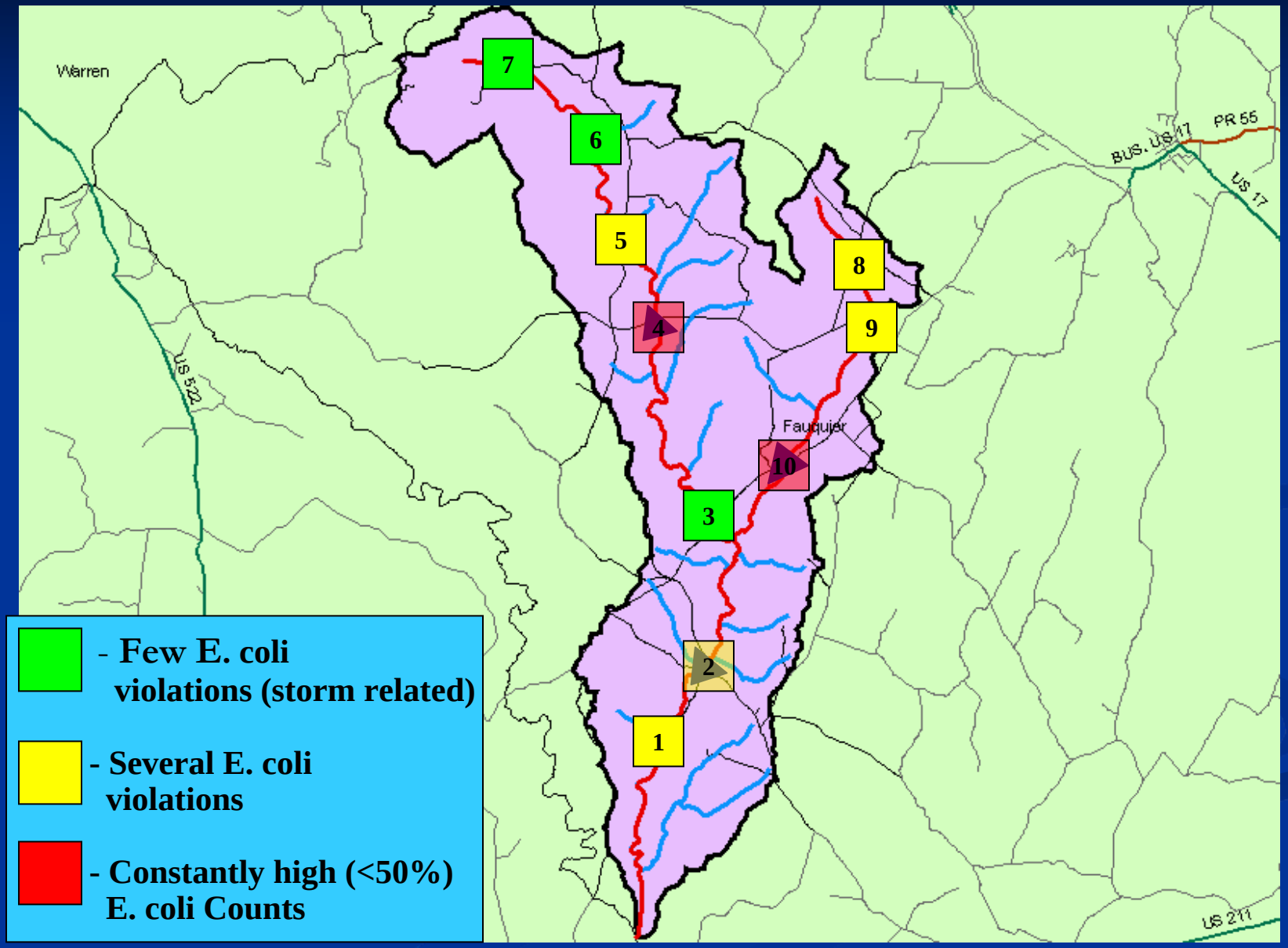
Thumb Run Stations and Status



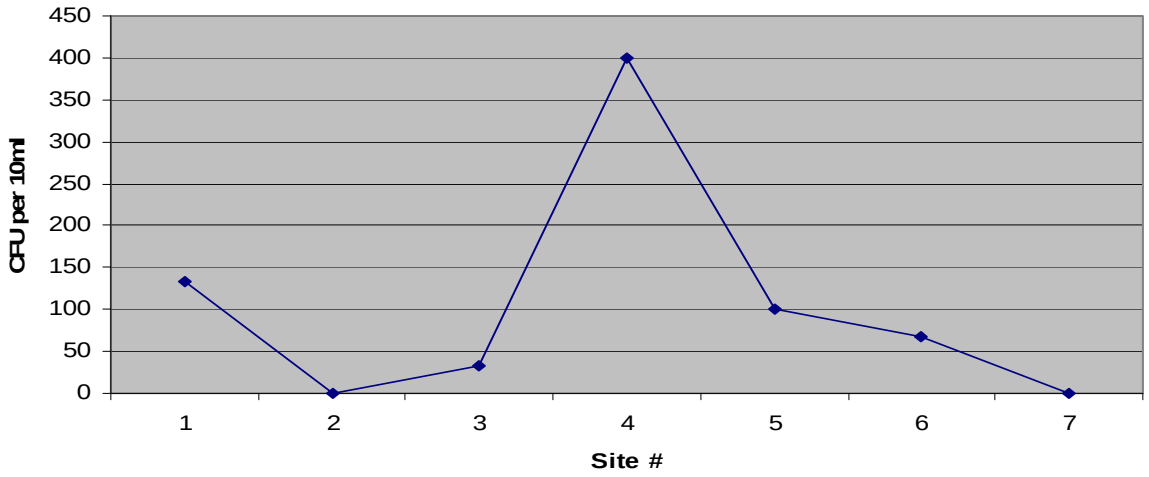
Coliscan Data Reporting Form

Group:	JMSWCD			**Watershed:**	Thumb Run 2005					
Sample Site #	Sample Date	Sample Time	Rain Past 24 Hours Inches	Incubator Time In	Incubator Temp In	Incubator Time Out	Incubator Temp Out	Sample Volume ml	# E. coli Colonies per Plate	Total Count	Comments
TR1	17-Oct	8:53am	0	11:45am	36C	7:45am	36C	3	2	67	
TR2	17-Oct	9:04am	0	11:45am	36C	7:45am	36C	3	6	200	
TR3	17-Oct	9:12am	0	11:45am	36C	7:45am	36C	3	4	133	
TR4	17-Oct	9:37am	0	11:45am	36C	7:45am	36C	3	55	1833	unfenced, cows in pasture upstream
TR5	17-Oct	9:47am	0	11:45am	36C	7:45am	36C	3	4	133	CREP on both sides
TR6	17-Oct	9:53am	0	11:45am	36C	7:45am	36C	3	4	133	new culvert and seeding
TR7	17-Oct	10:02am	0	11:45am	36C	7:45am	36C	3	2	67	
TR8	17-Oct	9:28am	0	11:45am	36C	7:45am	36C	3	273	9100	unfenced, water cloudy
TR9	17-Oct	9:23am	0	11:45am	36C	7:45am	36C	3	3	100	fence on right side
TR10	17-Oct	9:17am	0	11:45am	36C	7:45am	36C	3	7	233	

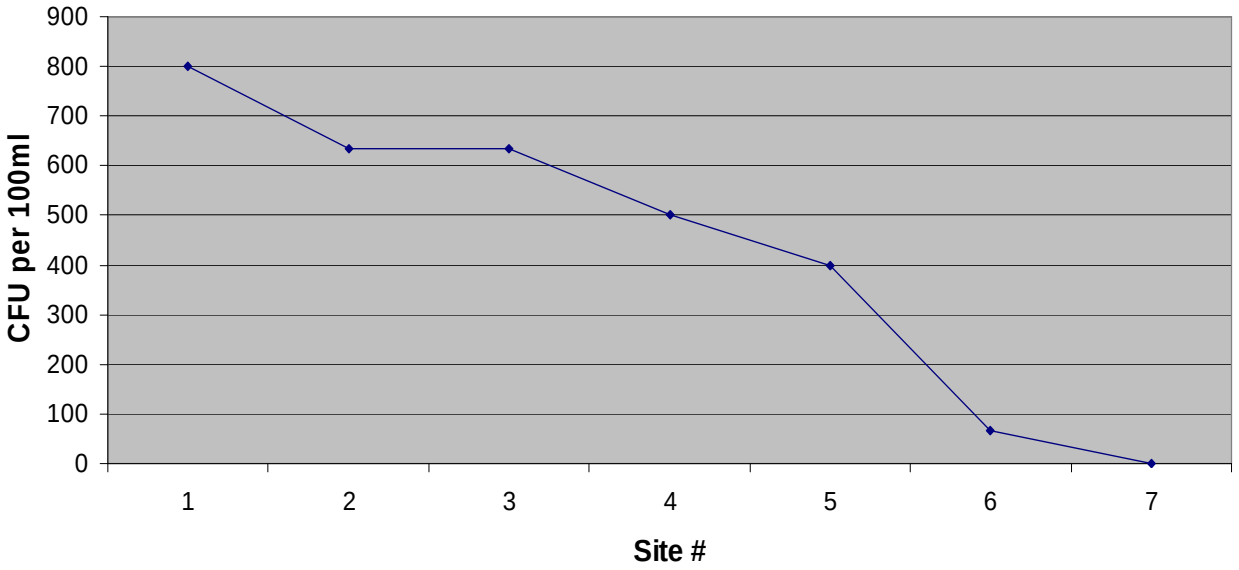
Thumb Run Stations and Status



Typical Result



Rain Event



General Observations

- Higher levels in summer than winter
- Hotspots probably reflect livestock rotation more than anything
- Some hotspots also have months with little or no E. coli
- Levels can drop quickly between monitoring sites